



09/26/02
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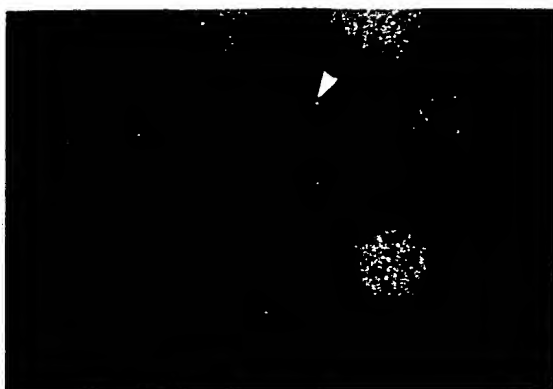


FIG. 1A



FIG. 1B

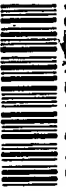


FIG. 1C

5' Exon	Intron	3' Exon
(2918)GCGG GTGAG	(3161)CTGTCCCTTGCAG	ATGGC
(3280)CCAT GTAAG	(5145)TTGATTTTTCTAG	AGAGG
(5272)AATT GTATG	(11942)TCTTTATTTCCAG	GCAAA

FIG. 1D

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FIG. 2A

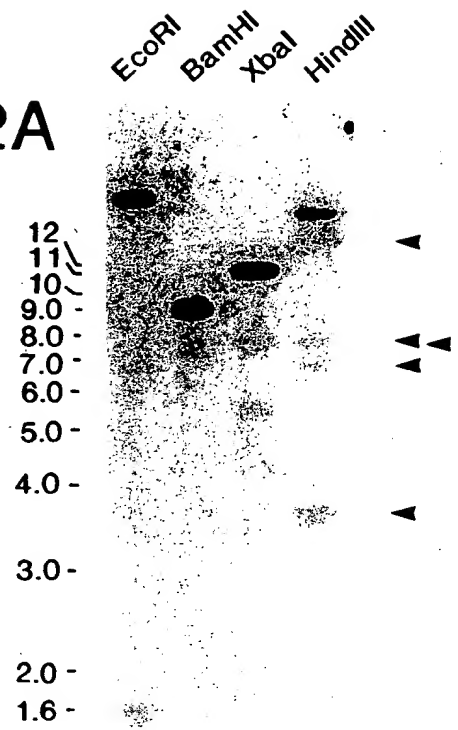


FIG. 2B

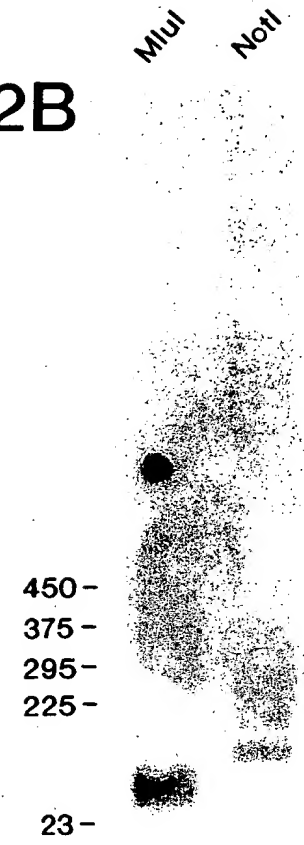
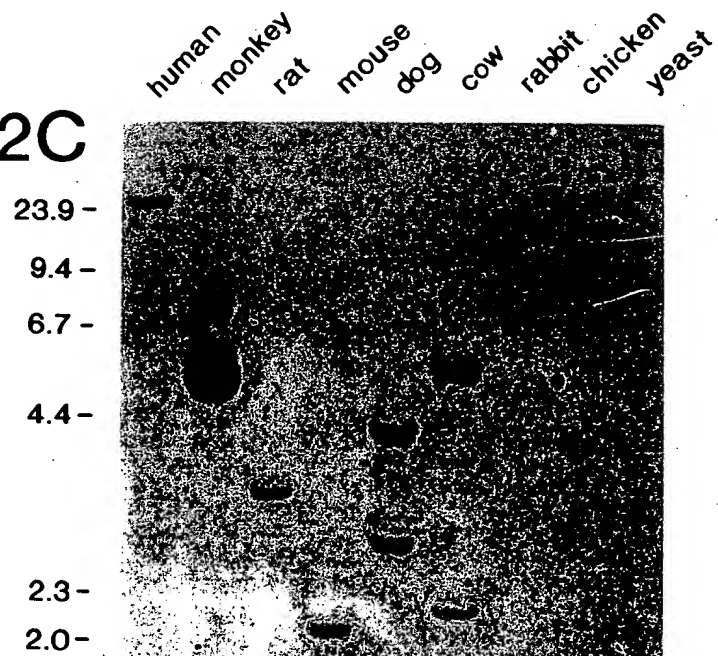


FIG. 2C



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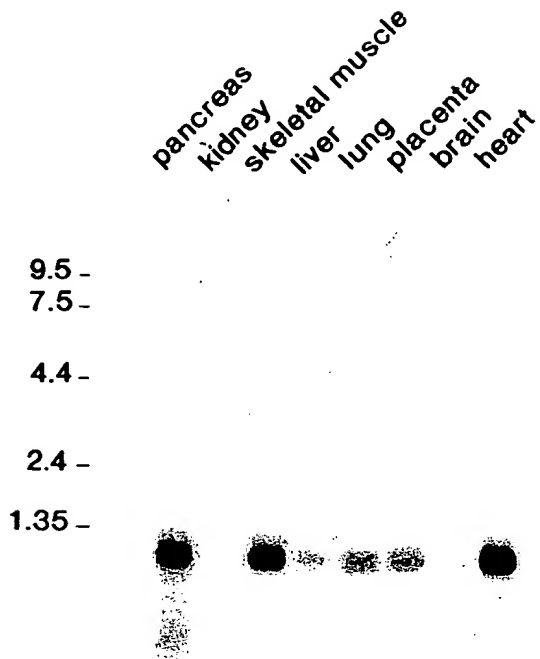


FIG. 3A

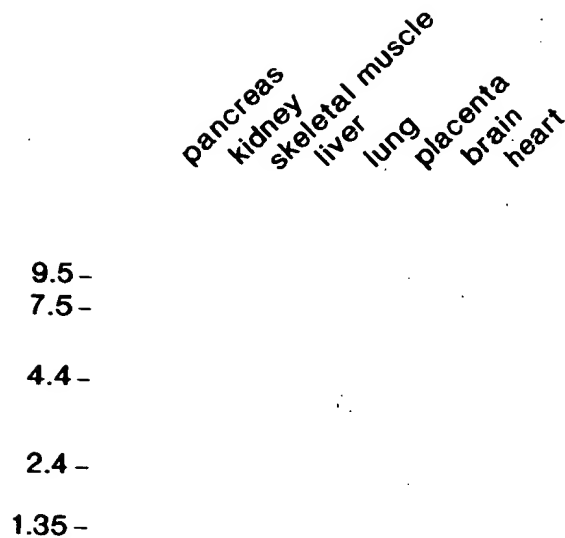


FIG. 3B

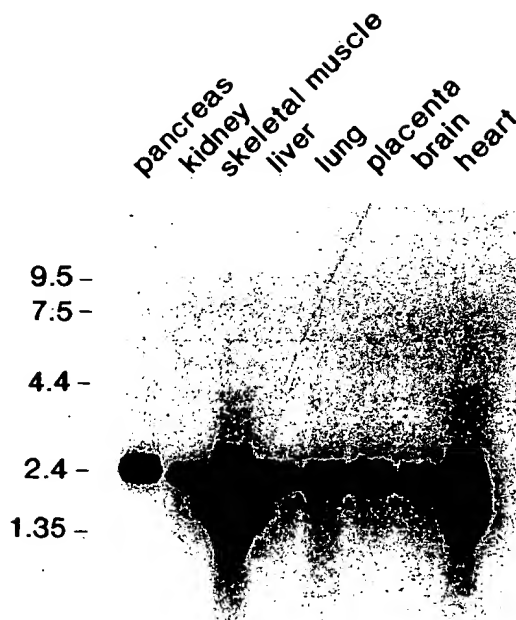


FIG. 3C

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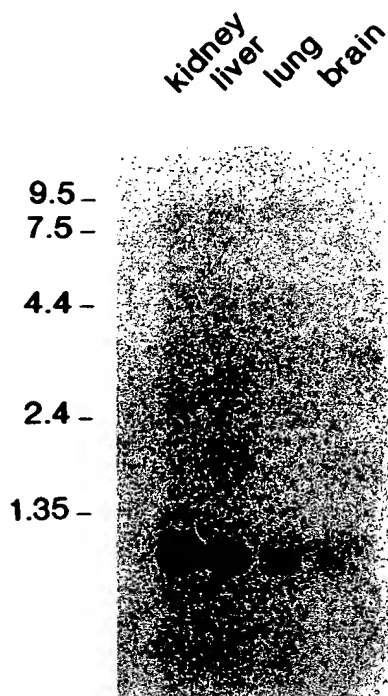


FIG. 3D

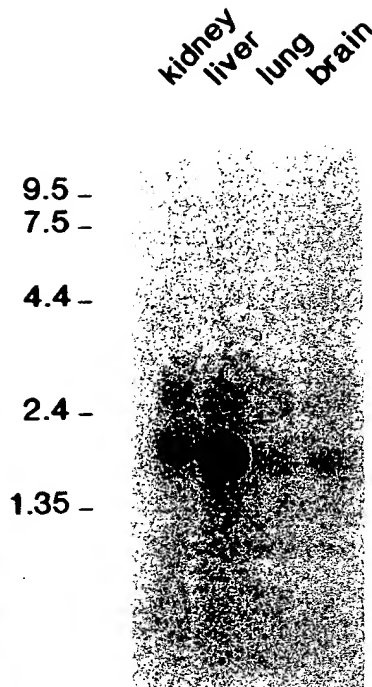


FIG. 3E

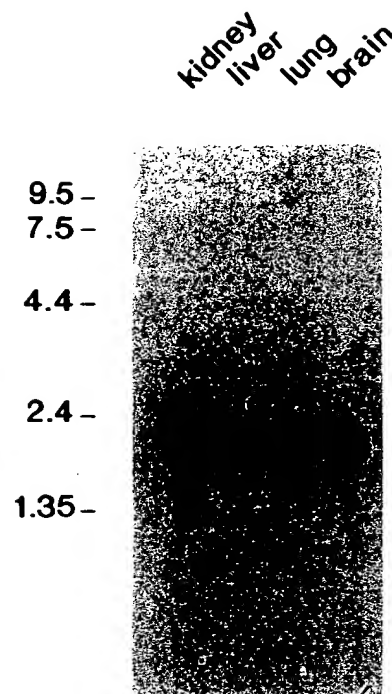


FIG. 3F

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FIG. 4B-2

YVGIGDKVKCFHCDGGLRDWEPGDDPWEEHAKWFPRCEFLLLAKGQEVVS Majority

2290	YVDRND	DV	KCF	C	DG	GL	RC	WEP	GDD	PW	EE	HAK	WF	PR	CE	FL	LL	AK	GQ	EV	VS	L49433	.PRO													
2240	YOKIGD	QV	RC	HC	NI	GL	RS	WOK	ED	EP	WE	EH	AK	WS	PK	Q	EV	LL	AK	GP	AY	VS	L49441	.PRO												
1136	YTG	YGD	NT	KCH	Y	C	DG	GL	KD	WE	ED	V	PWE	QH	V	R	W	E	D	R	C	AY	Q	LV	K	GR	D	V	-							
1139	YTG	QGD	KTR	CH	C	DG	GL	KD	WE	DD	A	P	WO	Q	H	A	R	W	Y	D	R	C	EY	V	LL	V	K	GR	D	V	-					
306	YTG	IKD	LV	Q	CH	S	CG	GL	EK	WO	EG	D	PL	DD	H	T	R	C	E	N	C	P	F	L	ON	M	K	S	S	A	E	V	T			
2240	YOKIGD	QV	RC	HC	NI	GL	RS	WOK	ED	EP	WE	EH	AK	WS	PK	Q	EV	LL	AK	GP	SY	VS	U32373	.PRO												
2291	AL	CE	GD	KV	K	CH	C	DG	GL	TD	WK	P	S	E	D	P	W	EQ	H	AK	W	Y	P	C	K	Y	L	E	Q	K	G	Q	E	Y	I	N
2290	AL	CE	GD	KV	K	CH	C	DG	GL	TD	WK	P	S	E	D	P	W	EQ	H	AK	W	Y	P	C	K	Y	L	D	E	K	G	Q	E	Y	I	N
2283	YV	CNS	D	V	K	CH	C	DG	GL	RC	W	ES	G	D	D	P	W	Q	H	AK	W	F	PR	C	EY	L	I	R	I	K	G	Q	E	F	I	R
2297	YV	GRND	D	V	K	CH	C	DG	GL	RC	W	ES	G	D	D	P	W	EH	A	K	W	F	PR	C	EY	L	I	R	I	K	G	Q	E	F	I	R
2291	AL	CE	GD	KV	K	CH	C	DG	GL	TD	WK	P	S	E	D	P	W	EQ	H	AK	W	Y	P	C	K	Y	L	E	Q	K	G	Q	E	Y	I	N
2240	YOKIGD	QV	RC	HC	NI	GL	RS	WOK	ED	EP	WE	EH	AK	WS	PK	Q	EV	LL	AK	GP	AY	VS	U45880	.PRO												
53	----	DL	AQ	CE	FC	F	K	E	LE	CG	WE	ED	DD	PI	EE	HK	H	SS	G	A	FL	S	-----	SURVIVIN	.PRO											

FIG. 4A

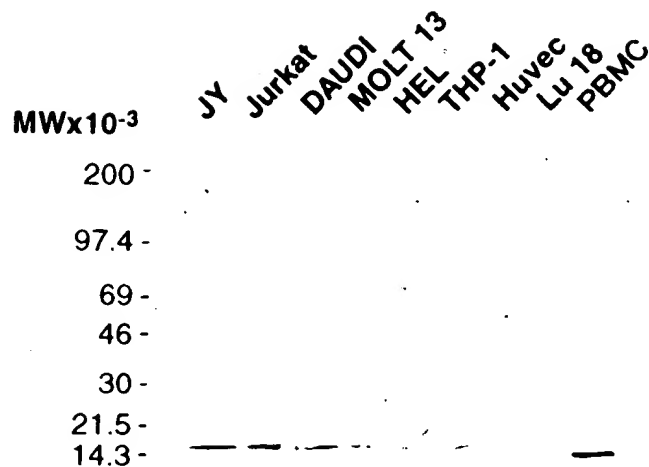
10 20 30 40

MGAPTLPPAW OPFLKDHRS TFKNWPFFLEG CACTPERMAE 40
AGFIHCPTEN EPDLAOCFFC FKELEGWEPD DOPIEEHKKH 80
SSGCAFLSVK KQFEELTLGE FLKLDREKAK NKIAKEINNK 120
KKEFEETAKK VRRRAIEOLAA MD 142

FIG. 4B-1

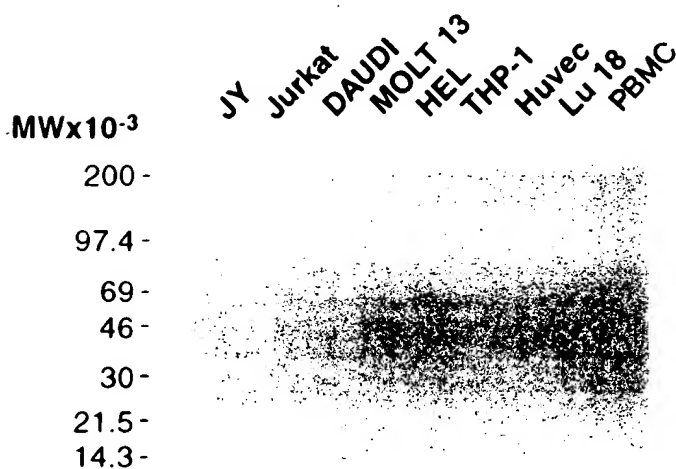
EEARLVTFQNWPD-AFL---TPQELAKAGFYLLGRGDQVOCFACGGKLA Majority

	210	220	230	240	250	
177	EEARLVTFQNWPD-AFL	---TPQELAKAGFYLLGRGDQVOCFACGGKLA				L49433. PRO
113	EEARLVTFQNWPD-AFL	---TPQELAKAGFYLLGRGDQVOCFACGGKLA				L49441. PRO
7	EEARLVTFQNWPD-AFL	---TPQELAKAGFYLLGRGDQVOCFACGGKLA				P41436. PRO
18	EEARLVTFQNWPD-AFL	---TPQELAKAGFYLLGRGDQVOCFACGGKLA				P41437. PRO
159	EEARLVTFQNWPD-AFL	---TPQELAKAGFYLLGRGDQVOCFACGGKLA				U19251. PRO
113	EEARLVTFQNWPD-AFL	---TPQELAKAGFYLLGRGDQVOCFACGGKLA				U32373. PRO
163	EEARLVTFQNWPD-AFL	---TPQELAKAGFYLLGRGDQVOCFACGGKLA				U32974. PRO
163	EEARLVTFQNWPD-AFL	---TPQELAKAGFYLLGRGDQVOCFACGGKLA				U36842. PRO
169	EEARLVTFQNWPD-AFL	---TPQELAKAGFYLLGRGDQVOCFACGGKLA				U45878. PRO
184	EEARLVTFQNWPD-AFL	---TPQELAKAGFYLLGRGDQVOCFACGGKLA				U45879. PRO
163	EEARLVTFQNWPD-AFL	---TPQELAKAGFYLLGRGDQVOCFACGGKLA				U45880. PRO
113	EEARLVTFQNWPD-AFL	---TPQELAKAGFYLLGRGDQVOCFACGGKLA				U45881. PRO
15	EEARLVTFQNWPD-AFL	---TPQELAKAGFYLLGRGDQVOCFACGGKLA				SURVIVIN. PRO



Survivin

FIG. 4C-1



RbIgG

FIG. 4C-2

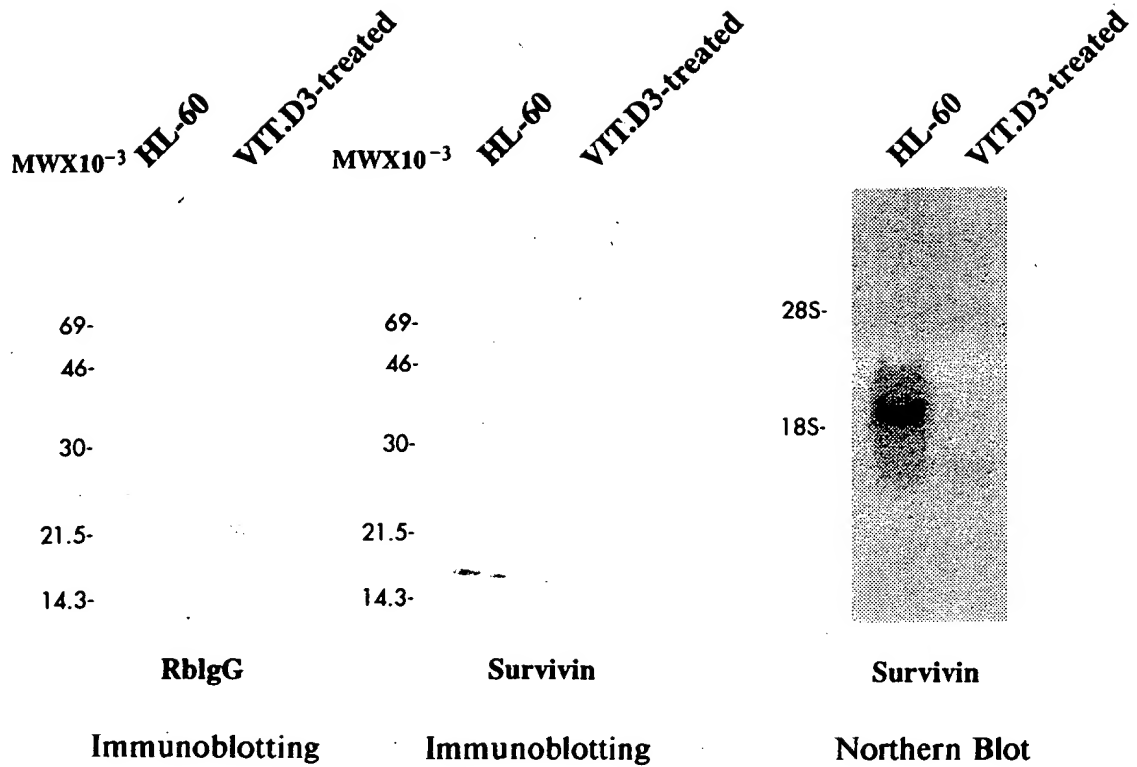


FIG. 5A FIG. 5B FIG. 5C

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FIG. 6A

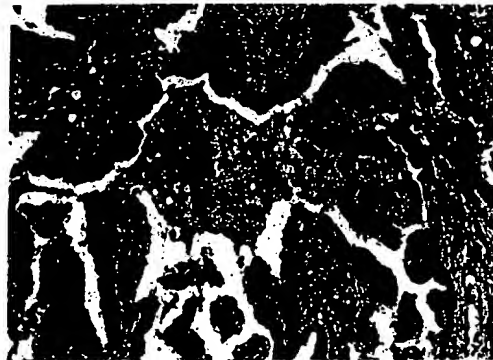


FIG. 6B

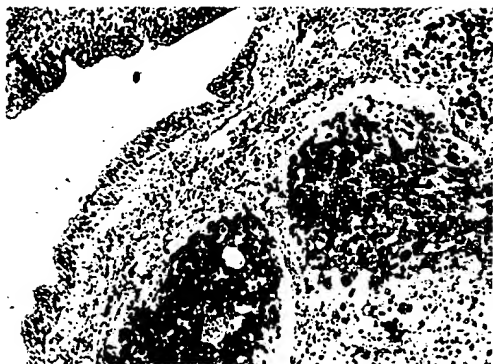


FIG. 6C

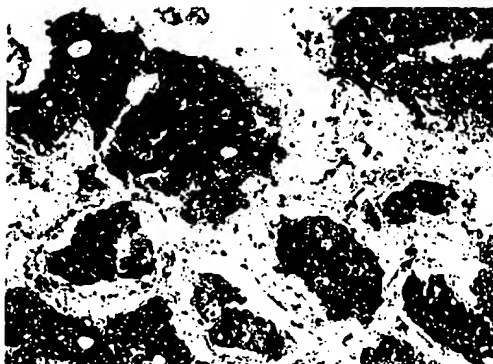


FIG. 6D

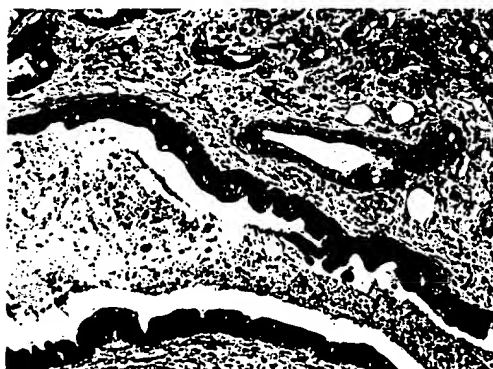


FIG. 6E



FIG. 6F

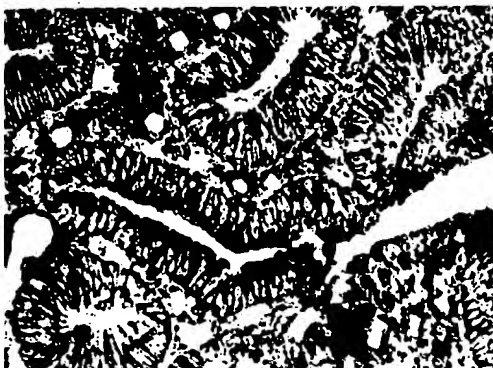


FIG. 6G



FIG. 6H

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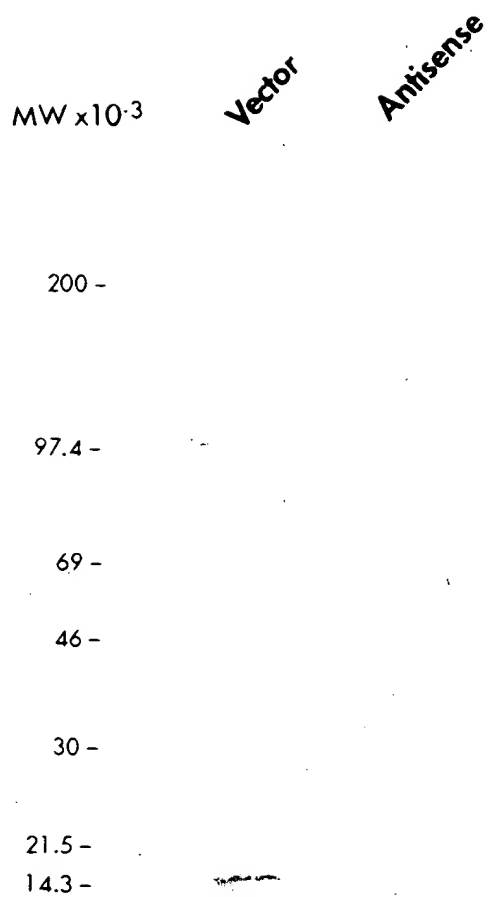


FIG. 7A

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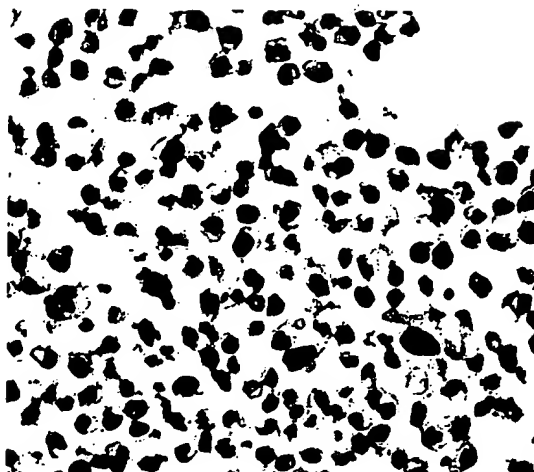


FIG. 7B-1

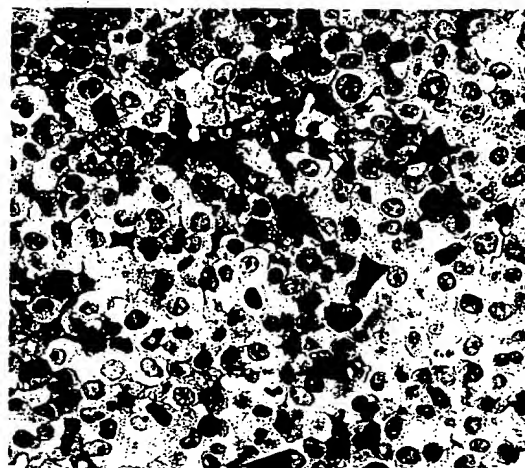


FIG. 7B-2

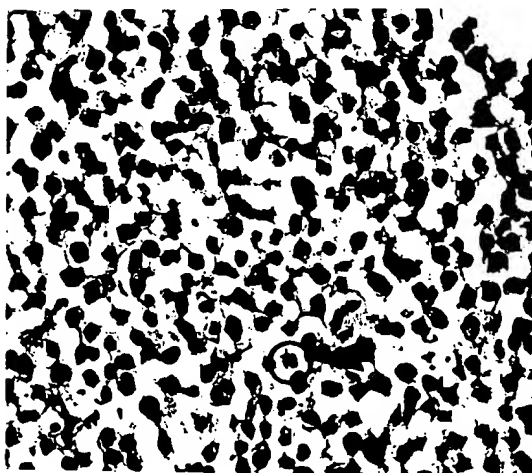


FIG. 7B-3

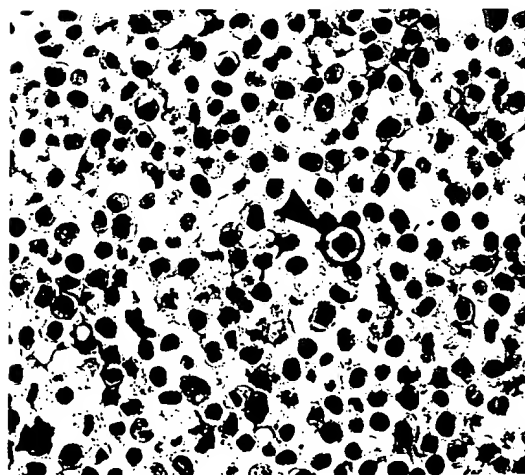


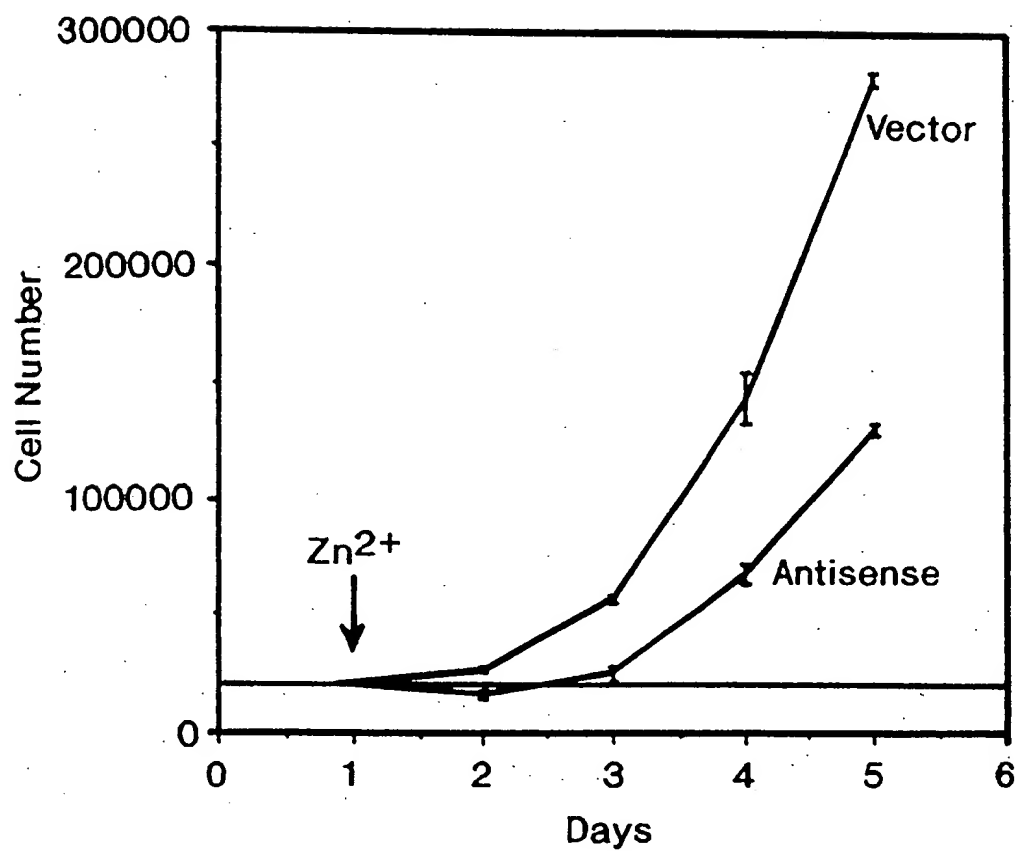
FIG. 7B-4

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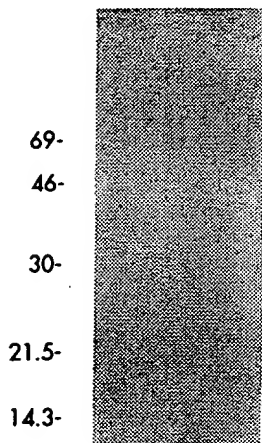
FIG. 7C



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MWX10⁻³ HL-60 VitD3-treated

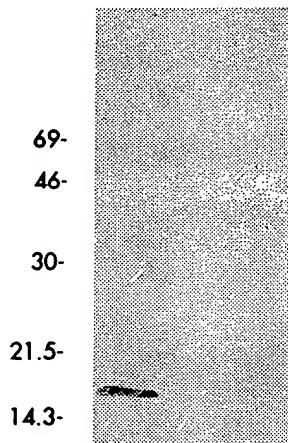


RblgG

Immunoblotting

FIG. 8A

MWX10⁻³ HL-60 VitD3-treated

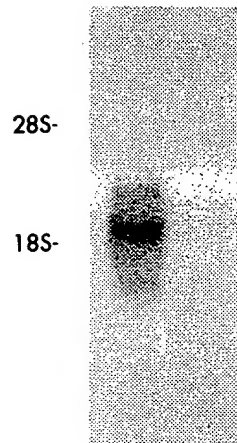


Survivin

Immunoblotting

FIG. 8B

HL-60 VitD3-treated



Survivin

Northern Blot

FIG. 8C

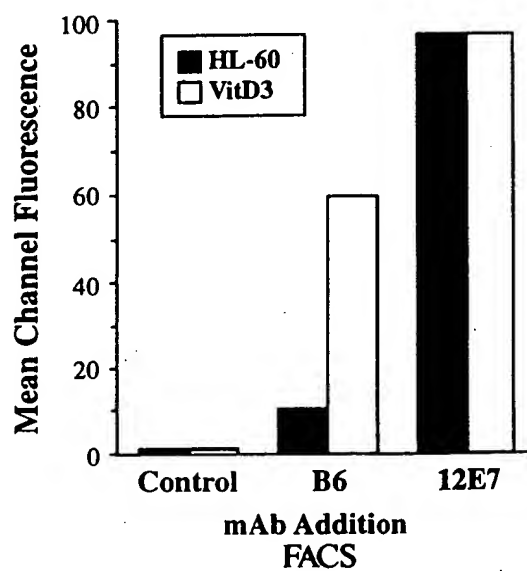


FIG. 8D

FIG. 9

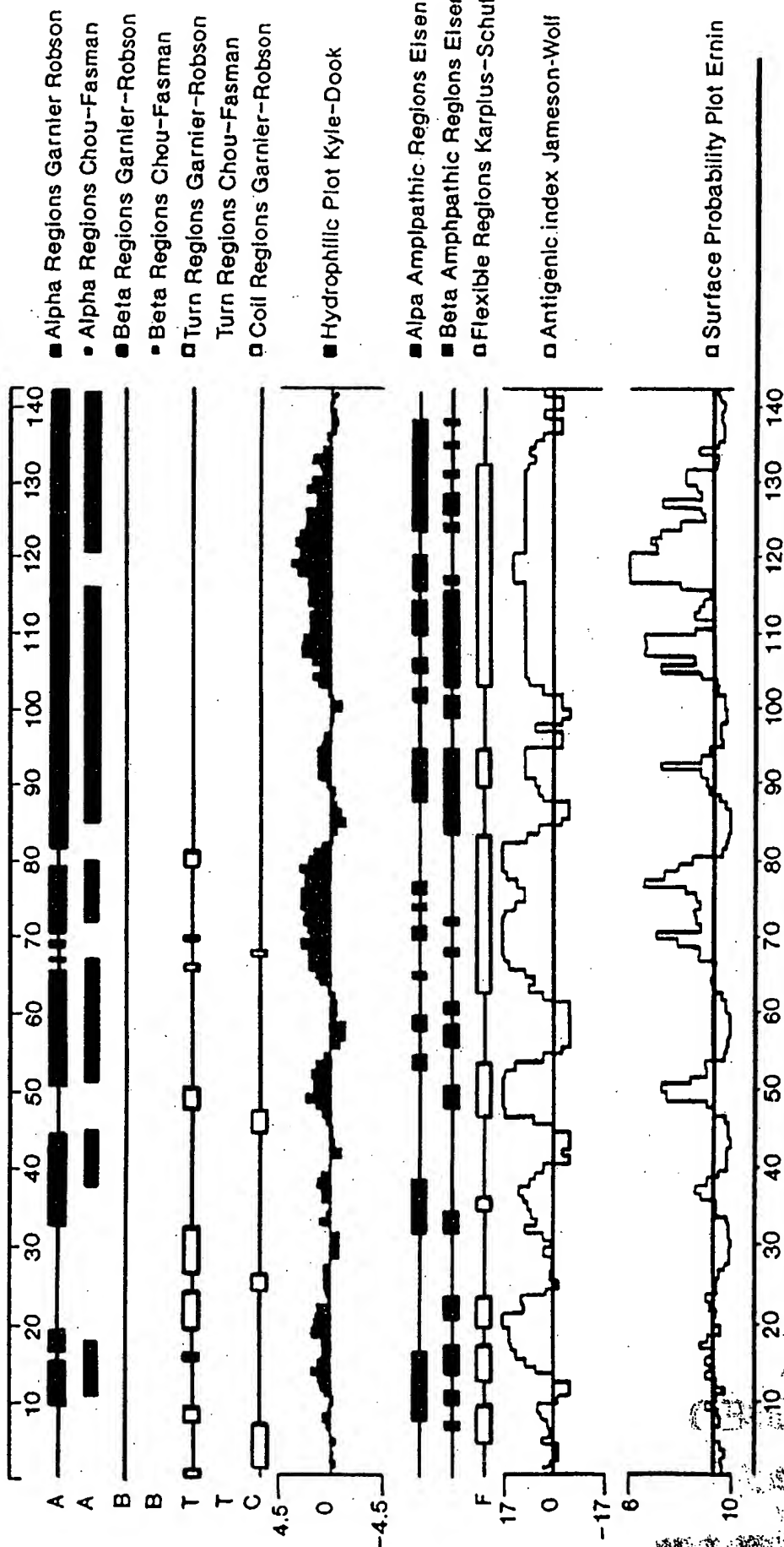


FIG. 10A

translation=MGAPTLPPAWQPFLKDHRISTFKNWPFLGCACTPERMAEAGFIHCP
TENEPDLAQCFFCFKELEGWEPDDDPIEEHKKHSSGCAFLSVKKQFEELTLGEFL
KLDREKAKNKIAKETNNKKKEFEETAKKVRRAIEQLAAMD

1	TCTAGACATG	CGGATATATT	CAAGCTGGGC	ACAGCACAGC	AGCCCCACCC
51	CAGGCAGCTT	GAAATCAGAG	CTGGGGTCCA	AAGGGACCAC	ACCCCGAGGG
101	ACTGTGTGGG	GGTCGGGGCA	CACAGGCCAC	TGCTTCCCCC	CGTCTTCTC
151	AGCCATTCTT	GAAGTCAGCC	TCACTCTGCT	TCTCAGGGAT	TTCAAATGTG
201	CAGAGACTCT	GGCACTTTTG	TAGAAGCCCC	TTCTGGTCCT	AACTTACACC
251	TGGATGCTGT	GGGGCTGCAG	CTGCTGCTCG	GGCTCGGGAG	GATGCTGGGG
301	GCCCCGGTGC	CATGAGCTTT	TGAAGCTCCT	GGAAGTCGGT	TTTGAGGGTG
351	TTCAGGTCCA	GGTGGACACC	TGGGCTGTCC	TTGTCCATGC	ATTTGATGAC
401	ATTGTGTGCA	GAAGTGAAAA	GGAGTTAGGC	CGGGCATGCT	GGCTTATGCC
451	TGTAATCCCA	GCACTTTGGG	AGGCTGAGGC	GGGTGGATCA	CGAGGTCAGG
501	AGTTCAATAC	CAGCCTGGCC	AAGATGGTGA	AACCCCGTCT	CTACTAAAAA
551	TACAAAAAAA	TTAGCCGGGC	ATGGTGGCGG	GCGCATGTAA	TCCCAGCTAC
601	TGGGGGGGCT	GAGGCAGAGA	ATTGCTGGAA	CCCAGGAGAT	GGAGGTTGCA
651	GTGAGCCAAG	ATTGTGCCAC	TGCACTGCAC	TCCAGCCTGG	CGACAGAGCA
701	AGACTCTGTC	TCAAAAAAAA	AAAAAAAAG	TGAAAAGGAG	TTGTTCTTTT
751	CCTCCCTCCT	GAGGGCAGGC	AACTGCTGCG	GTTGCCAGTG	GAGGTGGTGC
801	GTCCTTGGTC	TGTGCCTGGG	GGCCACCCCA	GCAGAGGCCA	TGGTGGTGCC
851	AGGGCCCGGT	TAGCGAGCCA	ATCAGCAGGA	CCCAGGGGCG	ACCTGCCAAA
901	GTCAACTGGA	TTTGATAACT	GCAGCGAAGT	TAAGTTTCCT	GATTTTGATG
951	ATTGTGTTGT	GGTTGTGTAA	GAGAATGAAG	TATTTCCGGG	TAGTATGGTA
1001	ATGCCTTCAA	CTTACAAACG	GTTCAGGTAA	ACCACCCATA	TACATACATA
1051	TACATGCATG	TGATATATAC	ACATACAGGG	ATGTGTGTGT	GTTACATAT
1101	ATGAGGGGAG	AGAGACTAGG	GGAGAGAAAG	TAGGTTGGGG	AGAGGGAGAG
1151	AGAAAGGAAA	ACAGGAGACA	GAGAGAGAGC	GGGGAGTAGA	GAGAGGGAAG
1201	GGGTAAGAGA	GGGAGAGGAG	GAGAGAAAGG	GAGGAAGAAG	CAGAGAGTGA
1251	ATGTTAAAGG	AAACAGGCAA	AACATAAACA	GAAAATCTGG	GTGAAGGGTA
1301	TATGAGTATT	CTTTGTACTA	TTCTTGCAAT	TATCTTTTAT	TTAAATTGAC
1351	ATCGGGCCGG	GCGCAGTGGC	TCACATCTGT	AATCCCAGCA	CTTTGGGAGG
1401	CCGAGGCAGG	CAGATCACTT	GAGGTCAGGA	GTTTGAGACC	AGCCTGGCAA
1451	ACATGGTGAA	ACCCCATCTC	TACTAAAAAT	ACAAAAATTA	GCCTGGTGTG
1501	GTGGTGCATG	CCTTTAATCT	CAGCTACTCG	GGAGGCTGAG	GCAGGAGAAT
1551	CGCTTGAACC	CGTGGCGGGG	AGGAGGTTGC	AGTGAGCTGA	GATCATGCCA
1601	CTGCACTCCA	GCCTGGGCGA	TAGAGCGAGA	CTCAGTTTCA	AATAAATAAA
1651	TAAACATCAA	AATAAAAAGT	TACTGTATTA	AAGAATGGGG	GCGGGGTGGG
1701	AGGGGTGGGG	AGAGGTTGCA	AAAATAAATA	AATAAATAAA	TAAACCCCAA
1751	AATGAAAAAG	ACAGTGGAGG	CACCAGGCCT	GCGTGGGGCT	GGAGGGCTAA
1801	TAAGGCCAGG	CCTCTTATCT	CTGGCCATAG	AACCAGAGAA	GTGAGTGGAT
1851	GTGATGCCCA	GCTCCAGAAG	TGACTCCAGA	ACACCCTGTT	CCAAAGCAGA
1901	GGACACACTG	ATTTTTTTTT	TAATAGGCTG	CAGGACTTAC	TGTTGGTGGG
1951	ACGCCCTGCT	TTGCGAAGGG	AAAGGAGGAG	TTTGCCCTGA	GCACAGGCCC
2001	CCACCCCTCA	CTGGGCTTTC	CCCAGCTCCC	TTGTCTTCTT	ATCACGGTAG
2051	TGGCCCAAGT	CCTGGCCCTC	GACTCCAGAA	GGTGGCCCTC	CTGGAAACCC
2101	AGGTCGTGCA	GTCAACGATG	TACTCGCCGG	GACAGCGATG	TCTGCTGCAC
2151	TCCATCCCTC	CCCTGTTTAT	TTGTCCTTCA	TGCCCCGTCTG	GAGTAGATGC

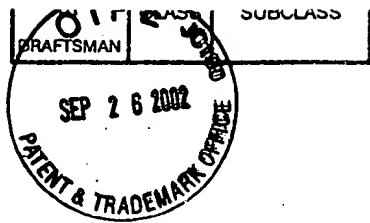


FIG. 10B

2201 TTTTTCGAGA GGTGGCACCC TGTAAGCTC TCCTGTCTGA CTTTTTTTTT
2251 TTTTITAGAC TGAGTTTTGC TCTTGTGACC TAGGCTGGAG TGCAATGGCA
2301 CAATCTCAGC TCACTGCACC CTCTGCCTCC CGGGTTCAAG CGATTCTCCT
2351 GCCTCAGCCT CCCGAGTAGT TGGGATTACA GGCATGCACC ACCACGCCCA
2401 GCTAATTTTT GTATTTTTAG TAGAGACAAG GTTTCACCGT GATGGCCAGG
2451 CTGGTCTTGA ACTCCAGGAC TCAAGTGATG CTCCTGCCTA GGCCTCTCAA
2501 AGTGTGGA TTACAGGCGT GAGCCACTGC ACCCGGCCTG CACGCGTTCT
2551 TTGAAAGCAG TCGAGGGGGC GCTAGGTGTG GGCAGGGACG AGCTGGCGCG
2601 GCGTCGCTGG GTGCACCGCG ACCACGGGCA GAGCCACGCG GCGGGAGGAC
2651 TACAACCTCC GGCACACCCC GCGCCGCCCC GCCTCTACTC CCAGAAGGCC
2701 GCGGGGGGTG GACCGCCTAA GAGGGCGTGC GCTCCCGACA TGCCCCGCGG
2751 CGCGCCATTA ACCGCCAGAT TTGAATCGCG GGACCCGTTG GCAGAGGTGG

—→Start

2801 CGGCGGCGGC ATGGGTGCCC CGACGTTGCC CCCTGCCTGG CAGCCCTTTC
2851 TCAAGGACCA CCGCATCTCT ACATTCAAGA ACTGGCCCTT CTTGGAGGGC
2901 TGCGCCTGCA CCGGAGCG GGTGAGACTG CCGGCCTCC TGGGGTCCCC
2951 CACGCCCCGCC TTGCCCTGTC CCTAGCGAGG CCACTGTGAC TGGGCCTCGG
3001 GGGTACAAGC CGCCCTCCCC TCCCCGTCTT GTCCCCAGCG AGGCCACTGT
3051 GGCTGGGCCC CTTGGGTCCA GGCCGGCCTC CCCTCCCTGC TTTGTCCCCA
3101 TCGAGGCCTT TGTGGCTGGG CCTCGGGGTT CCGGGCTGCC ACGTCCACTC
3151 ACGAGCTGTG CTGTCCCTTG CAGATGGCCG AGGCTGGCTT CATCCACTGC
3201 CCCACTGAGA ACGAGCCAGA CTTGGCCCAG TGTTCCTTCT GCTTCAAGGA
3251 GCTGGAAGGC TGGGAGCCAG ATGACGACCC CATGTAAGTC TTCTCTGGCC
3301 AGCCTCGATG GGCTTTGTTT TGAAGTACTG TGTCAAAGA TTTGAGTTGC
3351 AAAGACACTT AGTATGGGAG GGTGCTTTC CACCCTCATT GCTTCTTAAA
3401 CAGCTGTTGT GAACGGATAC CTCTCTATAT GCTGGTGCCT TGGTGATGCT
3451 TACAACCTAA TTAAATCTCA TTTGACCAA ATGCCTTGGG GTGGACGTAA
3501 GATGCCTGAT GCCTTTCATG TTCAACAGAA TACATCAGCA GACCCTGTTG
3551 TTGTGAACTC CCAGGAATGT CCAAGTGCTT TTTTGTAGAT TTTTAAAAA
3601 ACAGTTTAAT TGAAATATAA CCTACACAGC ACAAATAA CCCTTTGAAA
3651 GTGTGCACTT CACACTTTCG GAGGCTGAGG CGGGCGGATC ACCTGAGGTC
3701 AGGAGTTCAA GACCTGCCTG GCCAACTTGG CGAAACCCCG TCTCTACTAA
3751 AAATACAAAA ATTAGCCGGG CATGGTAGCG CACGCCCGTA ATCCAGCTA
3801 CTCGGGAGGC TAAGGCAGGA GAATCGCTTG AACCTGGGAG GCGGAGGTTG
3851 CAGTGAGCCG AGATTGTGCC AATGCACTCC AGCCTCGGCG ACAGAGCGAG
3901 ACTCCGTCAT AAAAATAAAA AATTGAAAAA AAAAAAGAA AGAAAGCATA
3951 TACTTCAGTG TTGTTCTGGA TTTTTTCTT CAAGATGCCT AGTTAATGAC
4001 AATGAAATTC TGTACTCGGA TGGTATCTGT CTTTCCACAC TGTAATGCCA
4051 TATTCTTTTC TCACCTTTTT TTCTGTGCGA TTCAGTTGCT TCCACAGCTT
4101 TAATTTTTTT CCCCTGGAGA TCTTAGTATG TTTGCTATGG TGGTTATACT
4151 GCATCCCCGT AATCACTGGG AAAAGATCAG TGGTATTCTT CTTGAAAATG
4201 AATAAGTGTT ATGATATTTT CAGATTAGAG TTACAACCTGG CTGTCTTTTT
4251 GGAATTGTG TGGCCATGTT TTCATTGTAA TGCAGTTCTG GTAACGGTGA
4301 TAGTCAGTTA TACAGGGAGA CTCCCCTAGC AGAAAATGAG AGTGTGAGCT
4351 AGGGGGTCCC TTGGGGAACC CGGGGCAATA ATGCCCTTCT CTGCCCTTAA
4401 TCCTTACAGT GGGCCGGGCA CGGTGGCTTA CGCCTGTAAT ACCAGCACTT
4451 TGGGAGGCCG AGGCGGGCGG ATCACGAGGT CAGGAGATCG AGACCATCTT
4501 GGCTAATACG GTGAAACCCC GTCTCCACTA AAAATACAAA AAATTAGCCG

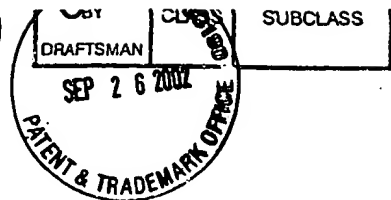


FIG. 10C

4551	GGCGTGGTGG	TGGGCGCCTG	TAGTCCCAGC	TACTCGGGAG	GCTGAGGCAG
4601	GAGAATGGCG	TGAACCCAGG	AGGCGGAGCT	TGCAGTGAGC	CGAGATTGCA
4651	CCACTGCACT	CCAGCCTGGG	CGACAGAATG	AGACTCCGTC	TCAAAAAAAAA
4701	AAAAAAAAAGA	AAAAAATCTT	TACAGTGGAT	TACATAACAA	TTCCAGTGAA
4751	ATGAAATTAC	TTCAAACAGT	TCCTTGAGAA	TGTTGGAGGG	ATTTGACATG
4801	TAATTCCTTT	GGACATATAC	CATGTAACAC	TTTTCCAAC	AATTGCTAAG
4851	GAAGTCCAGA	TAAAATAGAT	ACATTAGCCA	CACAGATGTG	GGGGGAGATG
4901	TCCACAGGGA	GAGAGAAGGT	GCTAAGAGGT	GCCATATGGG	AATGTGGCTT
4951	GGGCAAAGCA	CTGATGCCAT	CAACTTCAGA	CTTGACGTCT	TACTCCTGAG
5001	GCAGAGCAGG	GTGTGCCTGT	GGAGGGCGTG	GGGAGGTGGC	CCGTGGGGAG
5051	TGGACTGCCG	CTTTAATCCC	TTCAGCTGCC	TTTCCGCTGT	TGTTTTGATT
5101	TTTCTAGAGA	GGAACATAAA	AAGCATTCGT	CCGGTTGCGC	TTTCCTTTCT
5151	GTCAAGAAGC	AGTTTGAAGA	ATTAACCCTT	GGTGAATTTT	TGAAACTGGA
5201	CAGAGAAAGA	GCCAAGAACA	AAATTGTATG	TATTGGGAAT	AAGAACTGCT
5251	CAAACCCTGT	TCAATGTCTT	TAGCACTAAA	CTACCTAGTC	CCTCAAAGGG
5301	ACTCTGTGTT	TTCTCAGGA	AGCATTTTTT	TTTTTTTTCT	GAGATAGAGT
5351	TTCACTCTTG	TTGCCCAGGC	TGGAGTGCAA	TGGTGCAATC	TTGGCTCACT
5401	GCAACCTCTG	CCTCTCGGGT	TCAAGTGATT	CTCCTGCCTC	AGCCTCCCAA
5451	GTAACCTGGA	TTACAGGGAA	GTGCCACCAC	ACCCAGCTAA	TTTTTGATTT
5501	TTTAGTAGAG	ATGGGGTTTC	ACCACATTGC	CCAGGCTGGT	CTTGAACCTC
5551	TGACCTCGTG	ATTGCCCCAC	CTTGGCCTCC	CAAAGTGCTG	GGATTACAGG
5601	CGTGAACCAC	CACGCCTGGC	TTTTTTTTTT	TTGTTCTGAG	ACACAGTTTC
5651	ACTCTGTTAC	CCAGGCTGGA	GTAGGGTGGC	CTGATCTCGG	ATCACTGCAA
5701	CCTCCGCCTC	CTGGGCTCAA	GTGATTTGCC	TGCTTCAGCC	TCCCAAGTAG
5751	CCGAGATTAC	AGGCATGTGC	CACCACACCC	AGGTAATTTT	TGTATTTTTG
5801	GTAGAGACGA	GGTTTCACCA	TGTTGGCCAG	GCTGGTTTTG	AACTCCTGAC
5851	CTCAGGTGAT	CCACCCGCCT	CAGCCTCCCA	AAGTGCTGAG	ATTATAGGTG
5901	TGAGCCACCA	CACCTGGCCT	CAGGAAGTAT	TTTTATTTTT	AAATTTATTT
5951	ATTTATTTGA	GATGGAGTCT	TGCTCTGTCT	CCCAGGCTAG	AGTGCAGCGA
6001	CGGGATCTCG	GCTCACTGCA	AGCTCCGCCC	CCCAGGTTC	AGCCATTCTC
6051	CTGCCTCAGC	CTCCCGAGTA	GCTGGGACTA	CAGGCGCCCG	CCACCACACC
6101	CGGCTAATTT	TTTTGTATTT	TTAGTAGAGA	CGGGTTTTCA	CCGTGTTAGC
6151	CAGGAGGGTC	TTGATCTCCT	GACCTCGTGA	TCTGCCTGCC	TCGGCCTCCC
6201	AAAGTGCTGG	GATTACAGGT	GTGAGCCACC	ACACCCGGCT	ATTTTTATTT
6251	TTTTGAGACA	GGGACTCACT	CTGTACCTG	GGCTGCAGTG	CAGTGGTACA
6301	CCATAGCTCA	CTGCAGCCTC	GAACCTCTGA	GCTCAAGTGA	TCCTCCCACC
6351	TCATCCTCAC	AAGTAATTGG	GACTACAGGT	GCACCCACCC	ATGCCACCT
6401	AATTTATTTA	TTTATTTATT	TATTTATTTT	CATAGAGATG	AGGGTTCCCT
6451	GTGTTGTCCA	GGCTGGTCTT	GAACCTCTGA	GCTCACGGGA	TCCTTTTGCC
6501	TGGGCCTCCC	AAAGTGCTGA	GATTACAGGC	ATGAGCCACC	GTGCCCAGCT
6551	AGGAATCATT	TTTAAAGCCC	CTAGGATGTC	TGTGTGATTT	TAAAGCTCCT
6601	GGAGTGTGGC	CGGTATAAGT	ATATACCGGT	ATAAGTAAAT	CCCACATTTT
6651	CTGGGCTTTA	TTTATTTATT	TATTTATTTA	TTTATTTTTA	ATTTTTTTTT
6701	TTGAGACGAG	TCTCACTTTG	TCACCCAGGC	TGGAGTGCAG	TGGCAGGATC
6751	TCGGCTCACT	GCAACCTCTG	CCTCCCGGGG	TCAAGCGATT	CTCCTGCCTT
6801	AGCCTCCCGA	GTAGCTGGGA	CTACAGGCAC	GCACCACCAT	GCCTGGCTAA
6851	TTTTTGATTT	TTTAGTAGAC	GGGGTTTCAC	CATGCTGGCC	AAGCTGGTCT
6901	CAAACCTCTG	ACCTTGTGAT	CTGCCCCTT	TAGCCTCCCA	GAGTGCTGGG

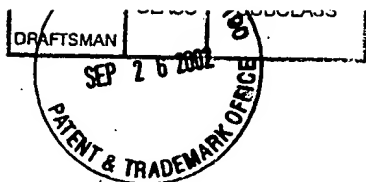


FIG. 10D

6951	ATTACAGGCA	TGAGCCACCA	TGCGTGGTCT	TTTTAAAATT	TTTTGATTTT
7001	TTTTTTTTTT	GAGACAGAGC	CTTGCTCTGT	CGCCCAGGCT	GGAGTGCAGT
7051	GGCACGATCT	CAGCTCACTA	CAAGCTCCGC	CTCCCGGGTT	CACGCCATTTC
7101	TTCTGCCTCA	GCCTCCTGAG	TAGCTGGGAC	TACAGGTGCC	CACCACCACG
7151	CCTGGCTAAT	TTTTTTTGGT	ATTTTTATTA	GAGACAAGGT	TTCATCATGT
7201	TGGCCAGGCT	GGTCTCAAAC	TCCTGACCTC	AAGTGATCTG	CCTGCCTCGG
7251	CCTCCCAAAG	CGCTGAGATT	ACAGGTGTGA	TCTACTGCGC	CAGGCCTGGG
7301	CGTCATATAT	TCTTATTGTC	TAAGTCTGGC	AGCCCCACAC	AGAATAAGTA
7351	CTGGGGGATT	CCATATCCTT	GTAGCAAAGC	CCTGGGTGGA	GAGTCAGGAG
7401	ATGTTGTAGT	TCTGTCTCTG	CCACTTGCCAG	ACTTTGAGTT	TAAGCCAGTC
7451	GTGCTCATGC	TTTCCTTGCT	AAATAGAGGT	TAGACCCCTT	ATCCCATGGT
7501	TTCTCAGGTT	GCTTTTCAGC	TTGAAAATTG	TATTCCTTTG	TAGAGATCAG
7551	CGTAAATAA	TTCTGTCCTT	ATATGTGGCT	TTATTTTAAT	TTGAGACAGA
7601	GTGTCACTCA	GTCGCCCAGG	CTGGAGTGTG	GTGGTGCGAT	CTTGGCTCAC
7651	TGCGACCTCC	ACCTCCCAGG	TTCAAGCGAT	TCTCGTGCCT	CAGGCTCCCA
7701	AGTAGCTGAG	ATTATAGGTG	TGTGCCACCA	GGCCCAGCTA	ACTTTTGTAT
7751	TTTTAGTAGA	GACAGGGTTT	TGCCATGTTG	GCTAAGCTGG	TCTCGAACTC
7801	CTGGCCTCAA	GTGATCTGCC	CGCCTTGCCA	TCCCAAAGTG	CTGGGATTAC
7851	AGGTGTGAAC	CACCACACCT	GGCCTCAATA	TAGTGGCTTT	TAAGTGCTAA
7901	GGACTGAGAT	TGTGTTTTGT	CAGGAAGAGG	CCAGTTGTGG	GTGAAGCATG
7951	CTGTGAGAGA	GCTTGTCACC	TGGTTGAGGT	TGTGGGAGCT	GCAGCGTGGG
8001	AACTGGAAAG	TGGGCTGGGG	ATCATCTTTT	TCCAGGTCAG	GGGTCAGCCA
8051	GCTTTTCTGC	AGCGTGCCAT	AGACCATCTC	TTAGCCCTCG	TGGGTCAGAG
8101	TCTCTGTTGC	ATATTGTCTT	TTGTTGTTTT	TCACAACCTT	TTAGAAACAT
8151	AAAAAGCATT	CTTAGCCCGT	GGGCTGGACA	AAAAAAGGCC	ATGACGGGCT
8201	GTATGGATTT	GGCCCAGCAG	GCCCTTGCTT	GCCAAGCCCT	GTTTTAGACA
8251	AGGAGCAGCT	TGTGTGCCTG	GAACCATCAT	GGGCACAGGG	GAGGAGCAGA
8301	GTGGATGTGG	AGGTGTGAGC	TGGAAACCAG	GTCCCAGAGC	GCTGAGAAAG
8351	ACAGAGGGTT	TTTGCCCTTG	CAAGTAGAGC	AACTGAAATC	TGACACCATC
8401	CAGTTCAGAG	AAGCCCTGAA	GTGCTGGTGG	ACGCTGCGGG	GTGCTCCGCT
8451	CTAGGGTTAC	AGGGATGAAG	ATGCAGTCTG	GTAGGGGGAG	TCCACTCACC
8501	TGTTGGAAGA	TGTGATTAAG	AAAAGTAGAC	TTTCAGGGCC	GGGCATGGTG
8551	GCTCACGCCT	GTAATCCCAG	CACTTTGGA	GGCCGAGGCG	GGTGGATCAC
8601	GAGGTCAGGA	GATCGAGACC	ATCCTGGCTA	ACATGGTGAA	ACCCCGTCTT
8651	TACTAAAAAT	ACAAAAAATT	AGCTGGGCGT	GGTGGCGGGC	GCCTGTAGTC
8701	CCAGCTACTC	GGGAGGCTGA	GGCAGGAGAA	TGGCGTGAAC	CTGGGAGGTG
8751	GAGCTTGCTG	TGAGCCGAGA	TCGCGCCACT	GCACTCCAGC	CTGGGCGACA
8801	GAGCGAGACT	CCGTCTCAA	AAAAAAAAAA	AAAGTAGGCT	TTCATGATGT
8851	GTGAGCTGAA	GGCGCAGTAG	GCAGAAGTAG	AGGCCTCAGT	CCCTGCAGGA
8901	GACCCCTCGG	TCTCTATCTC	CTGATAGTCA	GACCCAGCCA	CACTGGAAAG
8951	AGGGGAGACA	TTACAGCCTG	CGAGAAAAGT	AGGGAGATTT	AAAAACTGCT
9001	TGGCTTTTAT	TTTGAACGTG	TTTTTTTGTT	TGTTTGTTTT	CCCCAATTCA
9051	GAATACAGAA	TACTTTTATG	GATTTGTTTT	TATTACTTTA	ATTTTGAAAC
9101	AATATAATCT	TTTTTTTGTT	GTTTTTTTGA	GACAGGGTCT	TACTCTGTCA
9151	CCCAGGCTGA	GTGCAGTGGT	GTGATCTTGG	CTCACCTCAG	CCTCGACCCC
9201	CTGGGCTCAA	ATGATTCTCC	CACCTCAGCT	TCCCAAGTAG	CTGGGACCAC
9251	AGGTGCGTGT	GTTGCGCTAT	ACAAATCCTG	AAGACAAGGA	TGCTGTTGCT
9301	GGTGATGCTG	GGGATTCCCA	AGATCCCAGA	TTTGATGGCA	GGATGCCCTT

FIG. 10E

9351	GTCTGCTGCC	TTGCCAGGGT	GCCAGGAGGG	CGCTGCTGTG	GAAGCTGAGG
9401	CCCGGCCATC	CAGGGCGATG	CATTGGGCGC	TGATTCTTGT	TCCTGCTGCT
9451	GCCTCGGTGC	TTAGCTTTTG	AAACAATGAA	ATAAATTAGA	ACCAGTGTGA
9501	AAATCGATCA	GGGAATAAAT	TTAATGTGGA	AATAAACTGA	ACAACCTTAGT
9551	TCTTCATAAG	AGTTTACTTG	GTAAATACTT	GTGATGAGGA	CAAAACGAAG
9601	CACTAGAAGG	AGAGGCGAGT	TGTAGACCTG	GGTGGCAGGA	GTGTTTTGTT
9651	TGTTTTCTTT	GGCAGGGTCT	TGCTCTGTTG	CTCAGGCTGG	AGTACAGTGG
9701	CACAATCACA	GCTCACTATA	GCCTCGACCT	CCTGGACTCA	AGCAATCCTC
9751	CTGCCTCAGC	CTCCCAGTAG	CTGGGACTAC	AGGCGCATGC	CACCATGCCT
9801	GGCTAATTTT	AAATTTTTTT	TTTTCTCTTT	TTTGAGATGG	AATCTCACTC
9851	TGTCGCCCAG	GCTGGAGTGC	AGTGGCGTGA	TCTCGGCTGA	CGGCAAGCTC
9901	CGCCTCCCAG	GTTCACTCCA	TTCGCCTGCC	TCAGCCTCCC	AAGTAGCTGG
9951	GACTACAGGC	GCTGGGATTA	CAAACCCAAA	CCCAAAGTGC	TGGGATTACA
10001	GGCGTGAGCC	ACTGCACCCG	GCCTGTTTTG	TCTTTCAATA	GCAAGAGTTG
10151	TGTTTGCTTC	GCCCCTACCT	TTAGTGGA	AATGTATAAA	ATGGAGATAT
10201	TGACCTCCAC	ATTGGGGTGG	TAAATTATA	GCATGTATGC	AAAGGAGCTT
10251	CGCTAATTTA	AGGCTTTTTT	GAAAGAGAAG	AAACTGAATA	ATCCATGTGT
10301	GTATATATAT	TTTAAAAGCC	ATGGTCATCT	TTCCATATCA	GTAAAGCTGA
10351	GGCTCCCTGG	GACTGCAGAG	TTGTCCATCA	CAGTCCATTA	TAAGTGCGCT
10401	GCTGGGCCAG	GTGCAGTGGC	TTGTGCCTGA	ATCCCAGCAC	TTTGGGAGGC
10451	CAAGGCAGGA	GGATTCATTG	AGCCCAGGAG	TTTTGAGGCG	AGCCTGGGCA
10501	ATGTGGCCAG	ACCTCATCTC	TTCAAAAAAT	ACACAAAAAA	TTAGCCAGGC
10551	ATGGTGGCAC	GTGCCTGTAG	TCTCAGCTAC	TCAGGAGGCT	GAGGTGGGAG
10601	GATCACTTTG	AGCCTTGCAG	GTCAAAGCTG	CAGTAAGCCA	TGATCTTGCC
10651	ACTGCATTCC	AGCCTGGATG	ACAGAGCGAG	ACCCTGTCTC	TAAAAA
10701	AAAAACCAA	CGGTGCACTG	TTTTCTTTTT	TCTTATCAAT	TTATTATTTT
10751	TAAATTAAAT	TTTCTTTTAA	TAATTTATAA	ATTATAAATT	TATATTAAAA
10801	AATGACAAAT	TTTTATTACT	TATACATGAG	GTAAAACTTA	GGATATATAA
10851	AGTACATATT	GAAAAGTAAT	TTTTTGGCTG	GCACAGTGGC	TCACACCTGT
10901	AATCCCAGCA	CTTTGGGAGG	CCGTGGCGGG	CAGATCACAT	GAGATCATGA
10951	GTTCGAGACC	AACCTGACCA	ACATGGAGAG	ACCCCATCTC	TACTAAAAAT
11001	ACAAAATTAG	CCGGGGTGGT	GGCGCATGCC	TGTAATCCCA	GCTACTCGGG
11051	AGGCTGAGGC	AGGAGAATCT	CTTGAACCCG	GGAGGCAGAG	GTTGCGGTGA
11101	GCCAAGATCG	TGCCTTTGCA	CACCAGCCTA	GGCAACAAGA	GCGAAAGTCC
11151	GTCTCAAAAA	AAAAGTAATT	TTTTTTAAGT	TAACCTCTGT	CAGCAAACAA
11201	ATTTAACCCA	ATAAAGGTCT	TTGTTTTTTA	ATGTAGTAGA	GGAGTTAGGG
11251	TTTATAAAAA	ATATGGTAGG	GAAGGGGGTC	CCTGGATTTG	CTAATGTGAT
11301	TGTCATTTGC	CCCTTAGGAG	AGAGCTCTGT	TAGCAGAATG	AAAAAATTGG
11351	AAGCCAGATT	CAGGGAGGGA	CTGGAAGCAA	AAGAATTTCT	GTTGAGGAA
11401	GAGCCTGATG	TTTGCCAGGG	TCTGTTTAAC	TGGACATGAA	GAGGAAGGCT
11451	CTGGACTTTC	CTCCAGGAGT	TTCAGGAGAA	AGGTAGGGCA	GTGGTTAAGA
11501	GCAGAGCTCT	GCCTAGACTA	GCTGGGGTGC	CTAGACTAGC	TGGGGTGCCC
11551	AGACTAGCTG	GGGTGCCTAG	ACTAGCTGGG	TACTTTGAGT	GGCTCCTTCA
11601	GCCTGGACCT	CGGTTTCCTC	ACCTGTATAG	TAGAGATATG	GGAGCACCCA
11651	GCGCAGGATC	ACTGTGAACA	TAAATCAGTT	AATGGAGGAA	GCAGGTAGAG
11701	TGGTGCTGGG	TGCATACCAA	GCACTCCGTC	AGTGTTTCCT	GTTATTTCGAT
11751	GATTAGGAGG	CAGCTTAAAC	TAGAGGGAGT	TGAGCTGAAT	CAGGATGTTT
11801	GTCCCAGGTA	GCTGGGAATC	TGCCTAGCCC	AGTGCCAGT	TTATTTAGGT

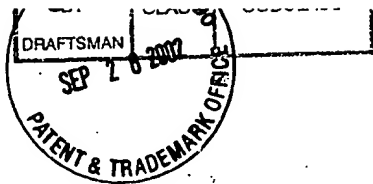


FIG. 10F

11851	GCTCTCTCAG	TGTTCCCTGA	TTGTTTTTTC	CTTTGTCATC	TTATCTACAG
11901	GATGTGACTG	GGAAGCTCTG	GTTTCAGTGT	CATGTGTCTA	TTCTTTATTT
11951	CCAGGCAAAG	GAAACCAACA	ATAAGAAGAA	AGAATTTGAG	GAAACTGCCA
12001	AGAAAGTGCG	CCGTGCCATC	GAGCAGCTGG	CTGCCATGGA	TTGAGGCCTC
12051	TGGCCGGAGC	TGCCTGGTCC	CAGAGTGGCT	GCACCACTTC	CAGGGTTTAT
12101	TCCCTGGTGC	CACCAGCCTT	CCTGTGGGCC	CCTTAGCAAT	GTCTTAGGAA
12151	AGGAGATCAA	CATTTTCAAA	TTAGATGTTT	CAACTGTGCT	CCTGTTTTGT
12201	CTTGAAAGTG	GCACCAGAGG	TGCTTCTGCC	TGTGCAGCGG	GTGCTGCTGG
12251	TAACAGTGGC	TGCTTCTCTC	TCTCTCTCTC	TTTTTTGGGG	GCTCATTTTT
12301	GCTGTTTTGA	TTCCCGGGCT	TACCAGGTGA	GAAGTGAGGG	AGGAAGAAGG
12351	CAGTGTCCCT	TTTGCTAGAG	CTGACAGCTT	TGTTCCGCTG	GGCAGAGCCT
12401	TCCACAGTGA	ATGTGTCTGG	ACCTCATGTT	GTTGAGGCTG	TCACAGTCCT
12451	GAGTGTGGAC	TTGGCAGGTG	CCTGTTGAAT	CTGAGCTGCA	GGTTCCTTAT
12501	CTGTCACACC	TGTGCCTCCT	CAGAGGACAG	TTTTTTTGTT	GTTGTGTTTT
12551	TTTGTTTTTT	TTTTTTGGTA	GATGCATGAC	TTGTGTGTGA	TGAGAGAATG
12601	GAGACAGAGT	CCCTGGCTCC	TCTACTGTTT	AACAACATGG	CTTCTTATT
12651	TTGTTTGAAT	TGTTAATTCA	CAGAATAGCA	CAAACATAAA	TTAAACTAA
12701	GCACAAAGCC	ATTCTAAGTC	ATTGGGGAAA	CGGGGTGAAC	TTCAGGTGGA
12751	TGAGGAGACA	GAATAGAGTG	ATAGGAAGCG	TCTGGCAGAT	ACTCCTTTTG
12801	CCACTGCTGT	GTGATTAGAC	AGGCCAGTG	AGCCGCGGGG	CACATGCTGG
12851	CCGCTCCTCC	CTCAGAAAAA	GGCAGTGGCC	TAAATCCTTT	TTAAATGACT
12901	TGGCTCGATG	CTGTGGGGGA	CTGGCTGGGC	TGCTGCAGGC	CGTGTGTCTG
12951	TCAGCCCAAC	CTTCACATCT	GTCACGTTCT	CCACACGGGG	GAGAGACGCA
13001	GTCCGCCAG	GTCCCCGCTT	TCTTTGGAGG	CAGCAGCTCC	CGCAGGGCTG
13051	AAGTCTGGCG	TAAGATGATG	GATTTGATTC	GCCCTCCTCC	CTGTCATAGA
13101	GCTGCAGGGT	GGATTGTTAC	AGCTTCGCTG	GAAACCTCTG	GAGGTCATCT
13151	CGGCTGTTCC	TGAGAAATAA	AAAGCCTGTC	ATTTCAAACA	CTGCTGTGGA
13201	CCCTACTGGG	TTTTTAAAT	ATTGTCAGTT	TTTCATCGTC	GTCCCTAGCC
13251	TGCCAACAGC	CATCTGCCCA	GACAGCCGCA	GTGAGGATGA	GCGTCCTGGC
13301	AGAGACGCAG	TTGTCTCTGG	GCGCTTGCCA	GAGCCACGAA	CCCCAGACCT
13351	GTTTGTATCA	TCCGGGCTCC	TTCGGGCAG	AAACAACCTGA	AAATGCACTT
13401	CAGACCCACT	TATTTATGCC	ACATCTGAGT	CGGCCTGAGA	TAGACTTTTC
13451	CCTCTAAACT	GGGAGAATAT	CACAGTGGTT	TTTGTTAGCA	GAAAATGCAC
13501	TCCAGCCTCT	GTACTCATCT	AAGCTGCTTA	TTTTTGATAT	TTGTGTCAGT
13551	CTGTAAATGG	ATACTTCACT	TTAATAACTG	TTGCTTAGTA	ATTGGCTTTG
13601	TAGAGAAGCT	GGAAAAAAT	GGTTTTGTCT	TCAACTCCTT	TGCATGCCAG
13651	GCGGTGATGT	GGATCTCGGC	TTCTGTGAGC	CTGTGCTGTG	GGCAGGGCTG
13701	AGCTGGAGCC	GCCCCCTCTCA	GCCCCGCTGC	CACGGCCTTT	CCTTAAAGGC
13751	CATCCTTAAA	ACCAGACCCT	CATGGCTGCC	AGCACCTGAA	AGCTTCCTCG
13801	ACATCTGTTA	ATAAAGCCGT	AGGCCCTTGT	CTAAGCGCAA	CCGCCTAGAC
13851	TTTCTTTCAG	ATACATGTCC	ACATGTCCAT	TTTTCAGGTT	CTCTAAGTTG
13901	GAGTGGAGTC	TGGGAAGGGT	TGTGAATGAG	GCTTCTGGGC	TATGGGTGAG
13951	GTTCCAATGG	CAGGTTAGAG	CCCCTCGGGC	CAACTGCCAT	CCTGGAAAGT
14001	AGAGACAGCA	GTGCCCGCTG	CCCAGAAGAG	ACCAGCAAGC	CAAACCTGGAG
14051	CCCCCATTGC	AGGCTGTGCG	CATGTGGAAA	GAGTAACTCA	CAATTGCCAA
14101	TAAAGTCTCA	TGTGGTTTTA	TCTACTTTTT	TTTTCTTTTT	CTTTTTTTTT
14151	GAGACAAGGC	CTTGCCCTCC	CAGGCTGGAG	TGCAGTGGA	TGACCACAGC
14201	TCACCGCAAC	CTCAAATTCT	TGCGTTCAAG	TGAACCTCCC	ACTTTAGCCT

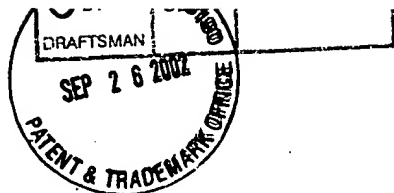


FIG. 10G

14251	CCCAAGTAGC	TGGGACTACA	GGCGCACGCC	ATCACACCCG	GCTAATTGAA
14301	AAATTTTTTT	TTTTGTTTAG	ATGGAATCTC	ACTTTGTTGC	CCAGGCTGGT
14351	CTCAAACCTC	TGGGCTCAAG	TGATCATCCT	GCTTCAGCGT	CCGACTTGTT
14401	GGTATTATAG	GCGTGAGCCA	CTGGGCCTGA	CCTAGCTACC	ATTTTTTAAT
14451	GCAGAAATGA	AGACTTGTAG	AAATGAAATA	ACTTGTCCAG	GATAGTCGAA
14501	TAAGTAACTT	TTAGAGCTGG	GATTTGAACC	CAGGCAATCT	GGCTCCAGAG
14551	CTGGGCCCTC	ACTGCTGAAG	GACACTGTCA	GCTTGGGAGG	GTGGCTATGG
14601	TCGGCTGTCT	GATTCTAGGG	AGTGAGGGCT	GTCTTTAAAG	CACCCCATTC
14651	CATTTTCAGA	CAGCTTTGTC	AGAAAGGCTG	TCATATGGAG	CTGACACCTG
14701	CCTCCCCAAG	GCTTCCATAG	ATCCTCTCTG	TACATTGTAA	CCTTTTATTT
14751	TGAAATGAAA	ATTCACAGGA	AGTTGTAAGG	CTAGTACAGG	GGATCC

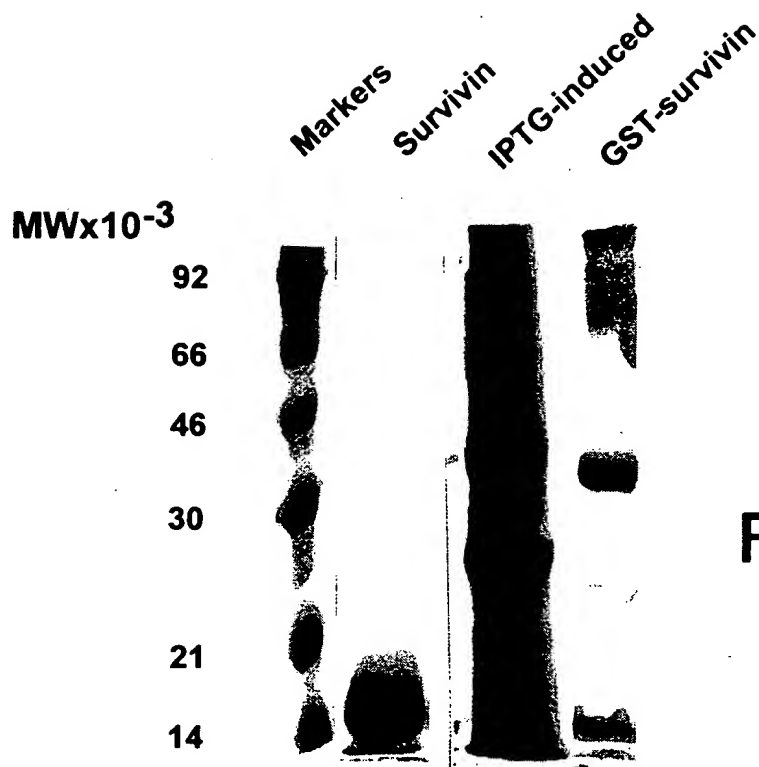


FIG. 11A

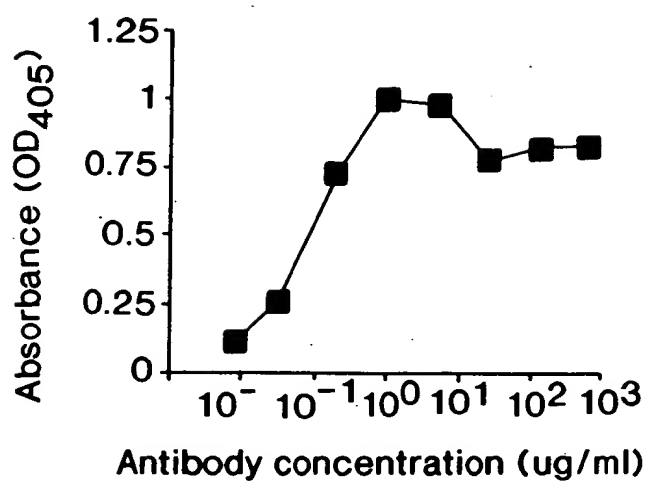


FIG. 11B

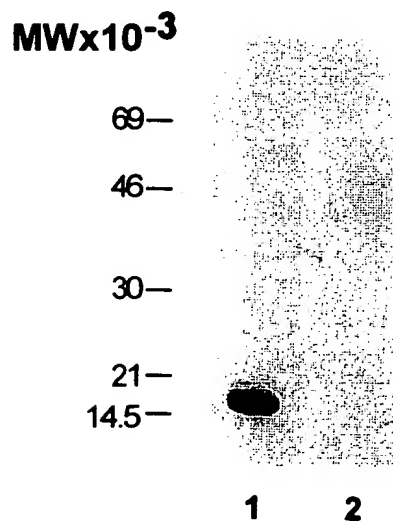
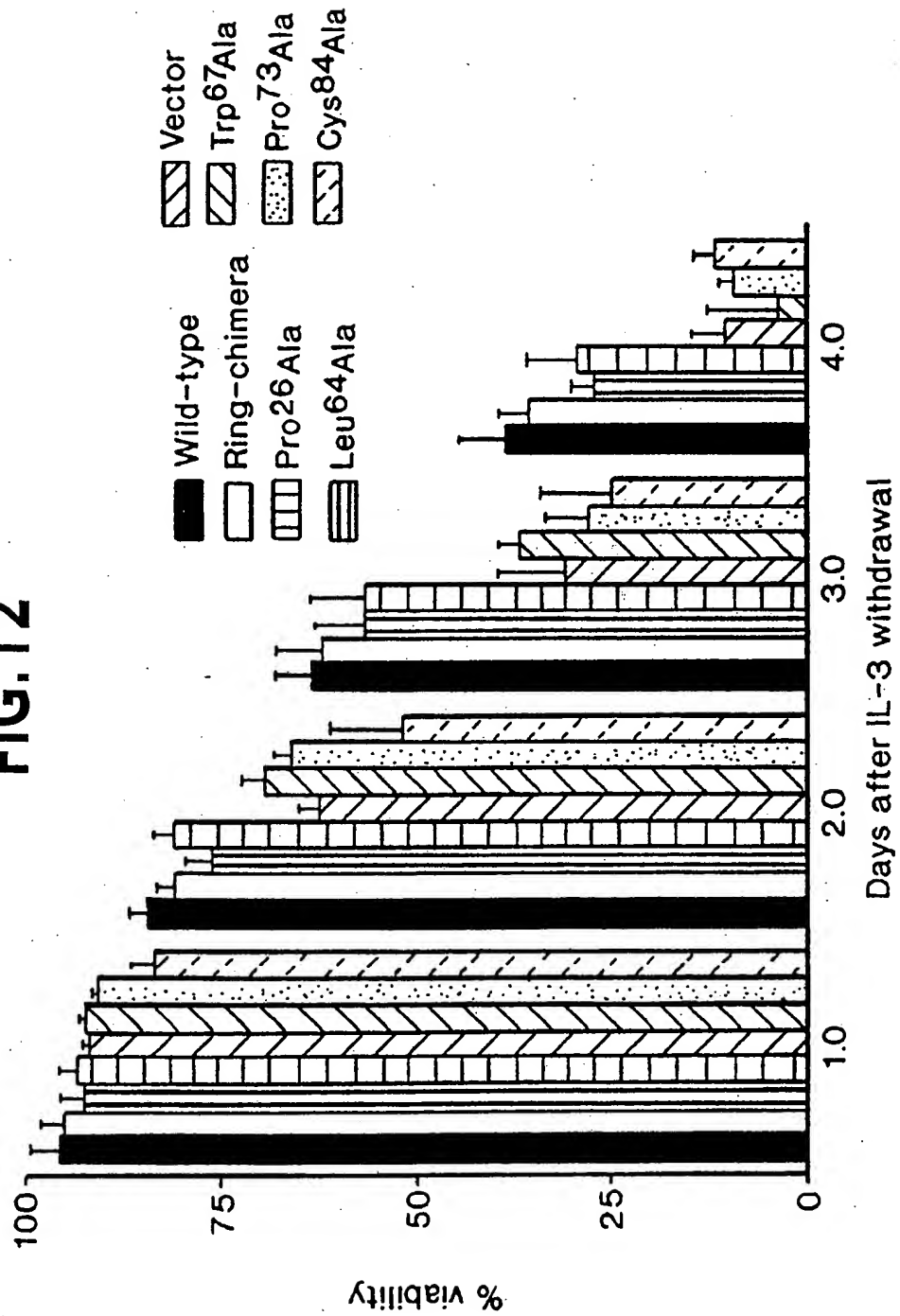


FIG. 11C

FIG.12



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FIG. 13

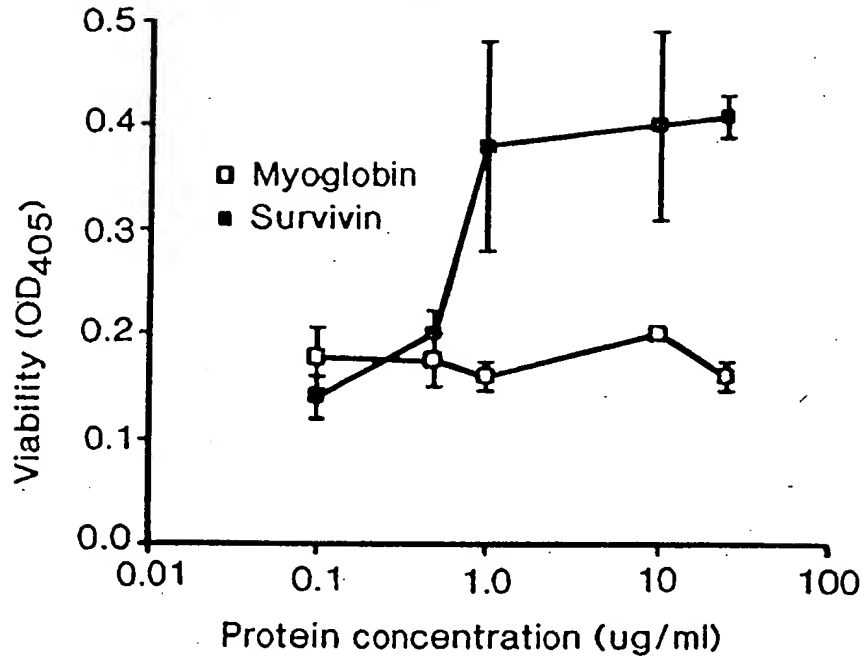


FIG. 14A

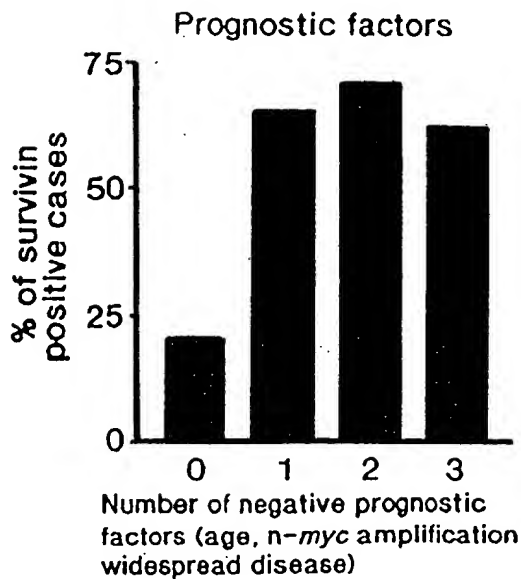


FIG. 14B

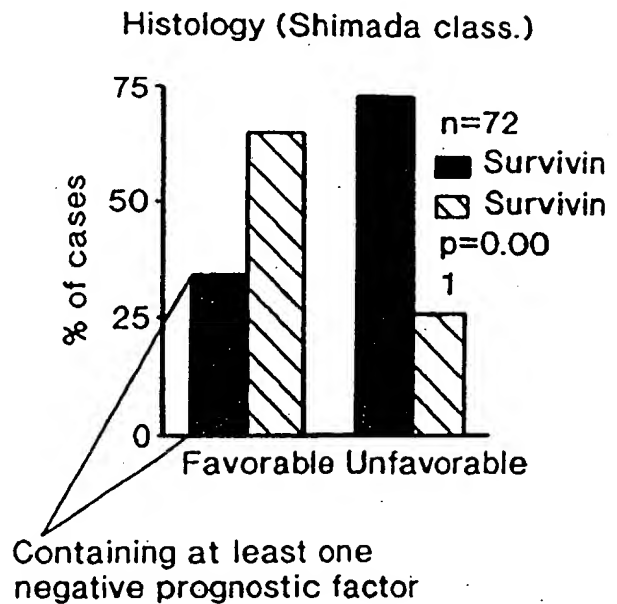


FIG. 15A

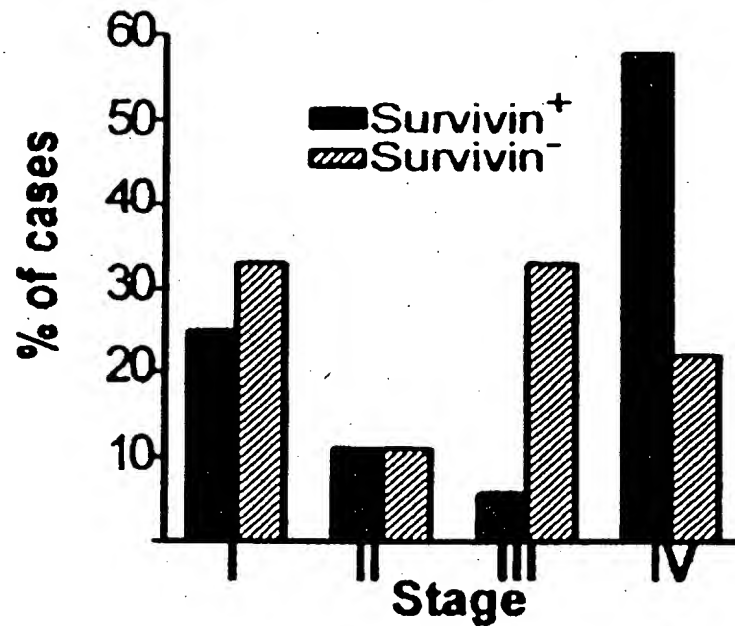


FIG. 15B

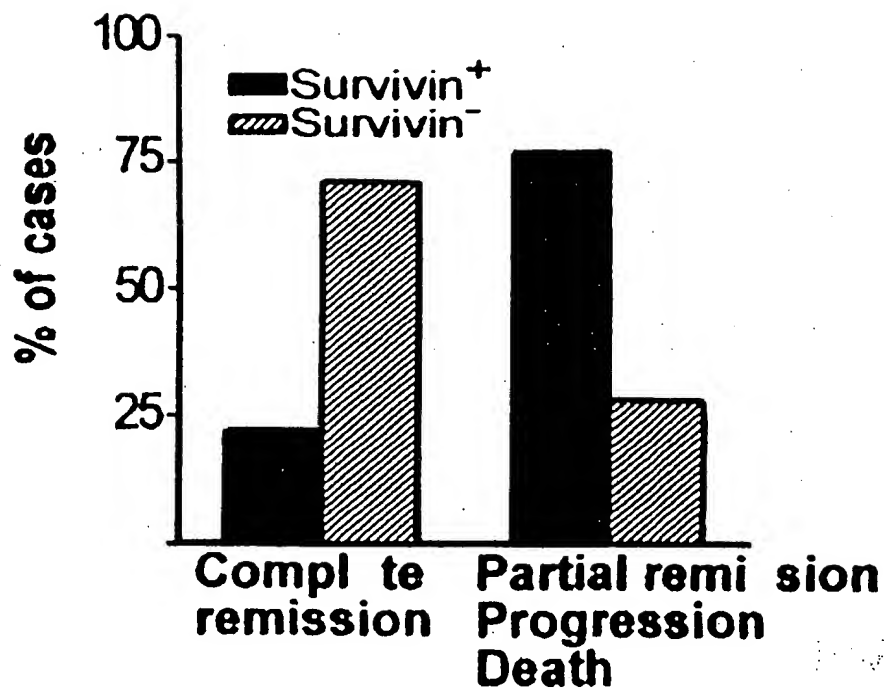


FIG. 16

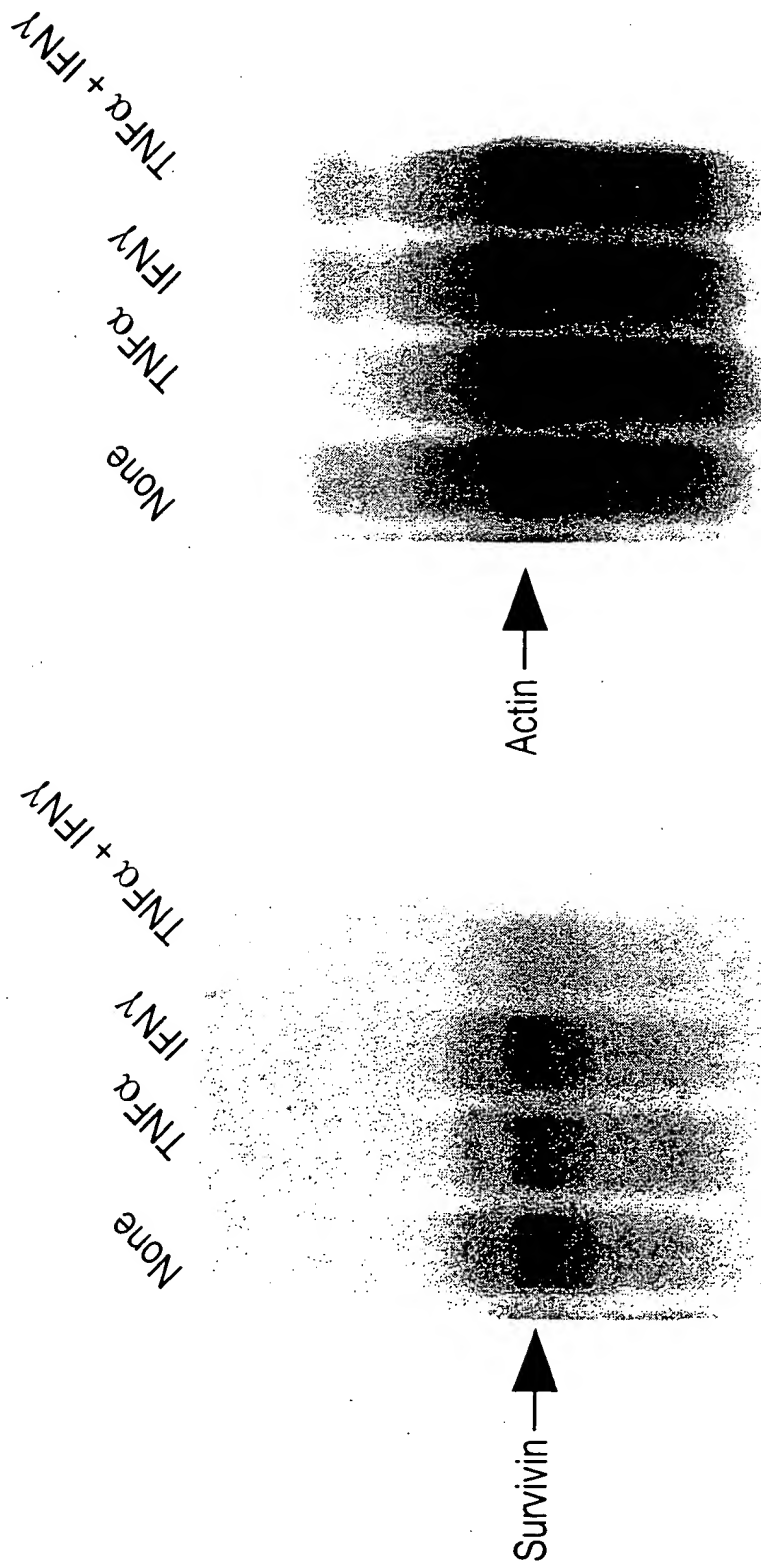
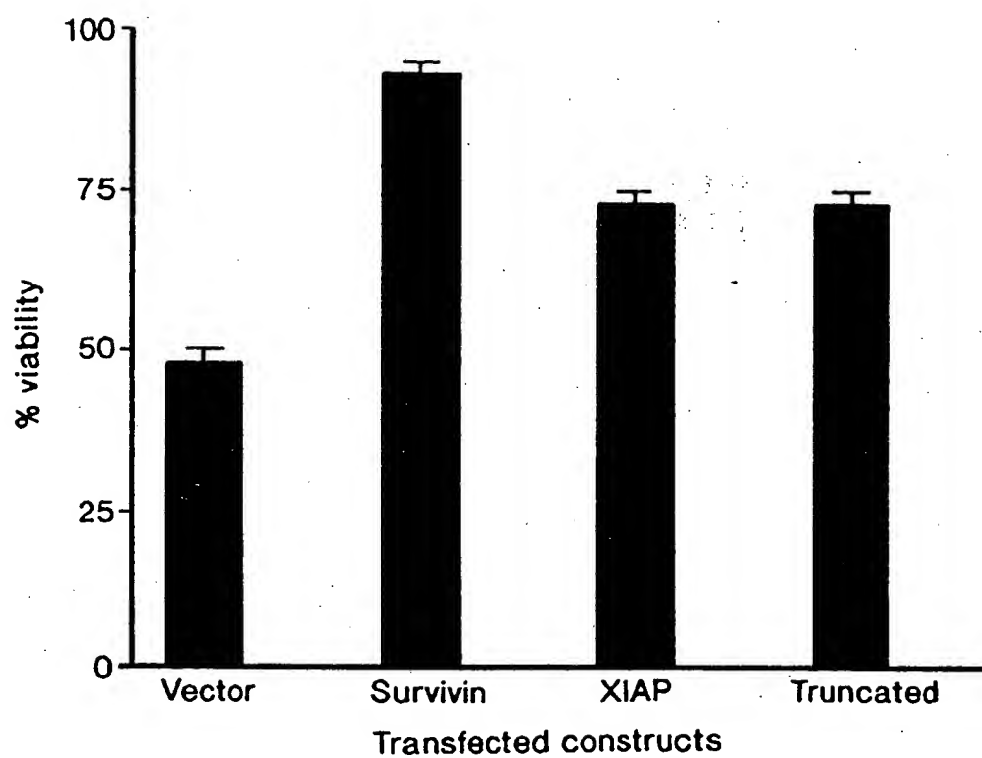


FIG. 17



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